SPRING Working Paper
SBC C Pathways for Improved Maternal, Infant, and Young Child Nutrition Practices

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ABOUT SPRING
The Strengthening Partnerships, Results and Innovations in Nutrition Globally (SPRING) project is a five-year USAID-funded Cooperative Agreement to strengthen global and country efforts to scale up high-impact nutrition practices and policies and improve maternal and child nutrition outcomes. The project is managed by JSI Research & Training Institute, Inc., with partners Helen Keller International, The Manoff Group, Save the Children, and the International Food Policy Research Institute. SPRING provides state-of-the-art technical support and focuses on the prevention of stunting and maternal and child anemia in the first 1,000 days.

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Introduction

In their seminal framework of the causes of undernutrition, the United Nations Children’s Fund (UNICEF) identified three underlying causes of undernutrition: inadequate care and feeding practices, household food insecurity, and an unhealthy household environment and inadequate health services. All are behavior related. According to an analysis of the World Health Organization’s (WHO) 2010 Global Burden of Disease report, 15 of the top 20 health risk factors in sub-Saharan Africa are predominantly behavioral, and the other five are highly influenced by behavior. Behavior change is paramount to the prevention of stunting and anemia.

Social and behavior change communication (SBCC) is a behavior-centered approach to facilitating individuals, households, groups, and communities in adopting and sustaining improved health and nutrition related practices. The approach draws upon social science and behavior change theories to address behavior and the environment within which behavior change occurs. SBCC activities can be classified into three basic categories: behavior change communication (BCC), social and community mobilization, and advocacy.

In this paper, the Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project presents pathways between SBCC delivery strategies and improved maternal infant and young child nutrition (MIYCN) practices. These pathways are based on a review of SBCC strategies and theories as well as a systematic literature review exploring the effectiveness of SBCC approaches in changing priority MIYCN practices. The findings from this literature review and an interactive web-based tool can be found on www.spring-nutrition.org.

HIGH-ImpACT MIYCn PRACTICES

Figure 1 provides a pictorial representation of MIYCN practices prioritized in The Lancet’s 2008 and 2013 Maternal and Child Nutrition Series, the WHO’s Essential Nutrition Actions: Improving Maternal,
Newborn, Infant and Young Child Health And Nutrition document (2013), the WHO’s e-Library of Evidence for Nutrition Actions, and UNICEF’s report Improving Child Nutrition: The Achievable Imperative for Global Progress. Practices are categorized into five primary intervention areas: dietary practices during pregnancy and lactation, breastfeeding practices, complementary feeding practices, control and prevention of anemia, and water, sanitation, and hygiene (WASH)-related practices. It is important to note that these areas are not mutually exclusive. Interventions will often define complementary feeding to include many of the practice for the control and prevention of anemia as well as WASH practices. Evidence supporting the positive relationship between each practice and nutritional status can be found in Annex 1 of this document.

The practices presented in Figure 1 do not represent an exhaustive list of practices affecting nutritional status during the 1,000 day window of opportunity. For example, correct latch and positioning for breastfeeding are very important practices, but are not listed because they are considered sub-practices related to a high-impact nutrition intervention (exclusive breastfeeding or continued breastfeeding). Furthermore, attending antenatal care visits during pregnancy and seeking timely appropriate care for pneumonia or diarrhea are closely related to nutritional outcomes, but are not included because they are not generally considered high-priority direct nutrition interventions.

Figure 1. Evidence-Based MIYCN Practices for Improving Nutritional Status

![Flowchart diagram of MIYCN practices](image-url)

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SBC PATHWAYS TO IMPROVED MIYCN PRACTICES AND STATUS

A well thought-out conceptual framework (sometimes referred to as a theory of change) can guide program design, identification of solutions and innovations, monitoring of change, and demonstration of success. Figure 2 presents a conceptual framework illustrating pathways from SBCC delivery strategies, targeting a range of populations in order to address key behavioral determinants, improve MIYCN practices and ultimately improve nutritional status. The immediate and underlying causes of undernutrition represented at the top of the framework are consistent with the UNICEF framework; however, care practices are emphasized given the focus of this document on MIYCN practices behaviors.8 The bottom half of the framework presents SBCC delivery strategies for addressing the causes of undernutrition and the determinants of MIYCN practices.

**Impact:** Improved nutritional status is depicted at the top of the framework.

**Immediate Causes:** Nutritional status is influenced by two primary immediate causes or determinants: dietary intake and health status. Diet and disease are intimately related. A poorly-nourished individual is more likely to develop disease, and an ill person may require more calories, absorb calories less efficiently, or suffer from anorexia. Although either determinant can contribute to undernutrition, it often results from a combination of the two. The immediate causes of undernutrition are depicted in the second level of the framework.

**Underlying Causes:** Dietary intake and disease are influenced by three primary underlying causes: food insecurity, inadequate care and feeding practices (e.g., exclusive breastfeeding), and an unhealthy household environment and inadequate health services (e.g., micronutrient supplementation or timely appropriate care for diarrhea). It is important to note this includes availability and quality of services and products as well as access to and demand for products and services, for example reproductive health products and services, or fortified food products and services.

Each of these underlying causes is heavily influenced by behaviors at the household level – behaviors related to food production, purchase, storage, and intrahousehold distribution; behaviors related to MIYCN care, and behaviors related to the utilization and demand for health and sanitation services. Access to food or optimal sanitary facilities alone does not necessarily lead to improved dietary intake or health status. Where food is accessible, for example, a caretaker must still make decisions about how the food is prepared and whether and how often the food is fed to children. Furthermore, the presence of a latrine does not necessarily imply that the latrine will be utilized or utilized consistent with best practices. The underlying causes of undernutrition are depicted in the third level of the framework.

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Behavioral Determinants: Behavior is complex. The framework’s fourth level depicts three primary determinants associated with the adoption of a behavior: demand, an enabling environment, and supply⁹:

- **Demand:** Adopting and sustaining optimal MIYCN practices and food and health services requires demand on the part of caregivers, their families, and communities. Demand is dependent on awareness, knowledge, and motivation to act, which is often influenced by attitudes, beliefs, and perceptions of social norms. Knowledge and motivation, however, may not be sufficient. Caregivers must also have the necessary skills, self-efficacy, agency, and control of resources (e.g. allocation of food, finances, and time) to act.

- **Environment:** The environmental factors that enable individuals and households to adopt and sustain practices include culture, social norms and support, and role models at all layers of society. Many global, national, and local factors affect individual and household practices as well as food and health systems. An enabling environment is one in which the social, political, financial, structural, and operational systems are conducive to ensuring the availability of and access to high-quality, affordable foods and health services, and the adoption and maintenance of priority MIYCN practices.

- **Supply:** The availability and quality of both affordable services and food, especially complementary foods and micronutrient-rich foods, in addition to health and support services, constitute supply. This requires enabling policies, finances, and systems to account for context (farming practices, markets, and industries, as well as cultural beliefs surrounding food and health), geography, gender, and intrahousehold resource allocation. Additional factors affecting availability and quality of services and food include the skills, time, and commitment of service providers from various sectors at both the community and facility or institutional level.

Target population: The framework’s fifth layer shifts the focus from determinants to delivery science. Behavior is complex, and many people can influence whether a caretaker adopts or fails to adopt a promoted behavior. Key target populations for behavior change interventions include caregivers, family members, partners, or peers (direct influencers), as well as other gate keepers or enablers such as community and religious leaders. Successful behavior change programs often target more than one population group.

Delivery strategies: Finally, the framework illustrates key delivery strategies for improving MIYCN practices. As the primary focus of this document is to map the pathways of SBCC, greater attention has been given to SBCC delivery strategies which include community and social mobilization, BCC, and advocacy. In addition there is a wide range of non-communication strategies that can promote or enable improved MIYCN practices.

1. **Community and social mobilization** engages and supports participation of institutions, community networks, social/civic and religious groups to shift attitudes, structures, and norms to better support priority practices.

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⁹ These categorizations of demand, supply (including availability and quality), and environment are based on the work by Marsh, Alegre, and Waltensperger. 2008. Journal of Nutrition 138: 630-633.
2. **Behavior change communication** involves face-to-face dialogue with individuals or groups to inform, motivate, problem solve, or plan, with the objective to promote and sustain behavior change. BCC activities typically target those who need to adopt and sustain priority practices (mothers, fathers, caregivers, and service providers) and may occur at home, in the community, or at a facility.

3. **Advocacy** informs and motivates leadership to create a supportive environment to achieve program objectives and development goals. Advocacy creates awareness and encourages leaders to take actions to enable the adoption of promoted practices.

4. **Non-communication strategies** include policy development, distribution of products (e.g., food, micronutrients, de-worming medication), and strengthening of human resource management systems, logistics or supply chain management, food value chain systems, or health management information systems.

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**Figure 2. Conceptual Framework of the Pathways from SBCC Delivery Strategies to Improved MIYCN Practices and Status**

- **Immediate causes**
  - Dietary intake
  - Health status (disease)

- **Underlying causes**
  - Food security
  - Access to quality health services and environment

- **Categories of care practices**
  - Diet during pregnancy and lactation
  - Breastfeeding
  - Complementary feeding
  - Prevention of anemia
  - WASH

- **Determinants of care practices**
  - Awareness, knowledge, and understanding
  - Ability to act (skills and efficacy, agency, and control of resources)
  - Motivation, attitudes, convictions, perception, and beliefs
  - Social norms and role models
  - Enabling systems and policies

- **Target populations**
  - Individuals/caregivers
  - Families, partners, and peers
  - Community leaders and service providers
  - Government, business, NGO, and faith leaders

- **Delivery strategies**
  - Community/social mobilization (campaigns, community events, etc.)
  - Behavior change communication (interpersonal communication, small media, and mass media)
  - Advocacy (raising resources and political/social leadership commitment)
  - Non-communication strategies including Systems Strengthening

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**Figure 2. Conceptual Framework of the Pathways from SBCC Delivery Strategies to Improved MIYCN Practices and Status**

- Improved nutritional status
- Dietary intake
- Health status (disease)
- Food security
- Access to quality health services and environment
- Diet during pregnancy and lactation
- Breastfeeding
- Complementary feeding
- Prevention of anemia
- WASH
- Awareness, knowledge, and understanding
- Ability to act (skills and efficacy, agency, and control of resources)
- Motivation, attitudes, convictions, perception, and beliefs
- Social norms and role models
- Enabling systems and policies
- Demand
- Environment
- Supply
- Individuals/caregivers
- Families, partners, and peers
- Community leaders and service providers
- Government, business, NGO, and faith leaders
- Community/social mobilization (campaigns, community events, etc.)
- Behavior change communication (interpersonal communication, small media, and mass media)
- Advocacy (raising resources and political/social leadership commitment)
- Non-communication strategies including Systems Strengthening
EVIDENCE-BASED SBCC DELIVERY STRATEGIES

SBCC approaches are grounded in theories of behavioral and social science. SBCC, adapted to local contexts, is generally considered effective mechanisms for improving MIYCN practices at the household level. However, there is little evidence to assist governments, donors, and programmers in understanding which approaches and tools are most effective for different types of audiences and behaviors. Donors are increasingly seeking more rigorous scientific justification to guide their investments in SBCC.

For evidence of the effectiveness of SBCC delivery strategies in improving MIYCN practices, please see SPRING’s “Evidence of Effective Approaches to Social and Behavior Change Communication for Preventing and Reducing Stunting and Anemia: Findings from a Systematic Literature Review” and an interactive web-based tool for identifying evidence for particular strategies and MIYCN practices at www.spring-nutrition.org.
Annex I. Supporting Evidence for MIYCN Practices

This annex provides detailed citations associated with each of the key practices portrayed in Figure 1 of the core document. The citations represent some of the best evidence available at the time this document was developed in 2013, supporting the prioritization of these practices for improving maternal and child nutrition during the first 1,000 days. It is not an exhaustive list of all references on the subject. The citations are organized by practice.

**ACTIVELY AND RESPONSIVELY FEED**

The WHO and UNICEF have issued guidelines on the importance of feeding behaviors and responsive feeding (WHO 2003). Relatively few studies explored feeding practices, and those that did were unable to fully separate the influence of responsive or active feeding practices from other changes in breastfeeding practices and types of complementary foods.


Some evidence suggests that active or responsive feeding does not affect weight gain.


**CONTINUE BREASTFEEDING THROUGH TWO YEARS OF AGE**


**EAT ADEQUATE QUANTITY OF FOOD DURING PREGNANCY AND LACTATION**

Evidence focuses primarily on the relationship with low birthweight.


EAT A DIVERSE DIET DURING PREGNANCY AND LACTATION


EAT IRON-RICH/FORTIFIED FOODS


EAT VITAMIN A-RICH/FORTIFIED FOODS


EXCLUSIVELY BREASTFEED FOR SIX MONTHS

Evidence regarding exclusive breastfeeding focuses primarily on mortality/survival. There is little evidence available regarding some of the specific practices (e.g., breastfeeding on demand, correct positioning, and proper attachment).


FEED CHILDREN A DIVERSE DIET


FEED CHILDREN APPROPRIATELY DURING AND AFTER ILLNESS


FEED CHILDREN WITH APPROPRIATE FREQUENCY

INITIATE BREASTFEEDING EARLY

Evidence focuses primarily on mortality/survival.


INTRODUCE COMPLEMENTARY FOODS AT SIX MONTHS


PROPERLY DISPOSE OF FECES


PROPERLY STORE/ PREPARE FOOD


PROPERLY STORE/TREAT WATER


**SLEEP UNDER AN INSECTICIDE-TREATED BEDNET**


**TAKE DEWORMING MEDICATION**

**Among Children**


**Among Pregnant Women**


**TAKE ENERGY AND PROTEIN SUPPLEMENTATION DURING PREGNANCY**


**TAKE IRON/IRON-FOLIC ACID SUPPLEMENTS**

Alderman, H. and S. Linnemayr. “Anemia in low income countries is unlikely to be addressed by economic development without additional programs.” Food and Nutrition Bulletin 30(3) 2009:265-269.


**TAKE MALARIA PROPHYLAXIS DURING PREGNANCY**


**USE A LATRINE**


USE MULTIPLE MICRONUTRIENT POWDER


WASH HANDS WITH SOAP AT CRITICAL MOMENTS

The five critical moments for handwashing include: after defecation, after cleaning a child, before preparing food, before eating, and before feeding a child.


